AFCEA-NOVA LUNCHEON

20:MARCH:2008

SUPPORTING AN EXPEDITIONARY ARMY AT WAR

LTG Jeff Sorenson
Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG

Agenda

Persistent Conflict

Army Initiatives & Imperatives

CIO/G-6 Focus Areas

- ◆ Network Service Centers
- ◆ Cyber Operations/Warfare
- ◆ CIO/G-6 500-Day Plan
- ◆ Knowledge Management & Data Czar
- ◆ Program Objective Memorandum 2010-2015

Conclusions

Era of Persistent Conflict

Extremist Networks

Globalization

Resource Competition

Demographic Trends

WMD Proliferation

Oil/Gas Demand

Terrorist Attacks

Iraq — Iran — Afghan

Insurgency

Islamic Extremism

Covert Action Nuclear Program

Narco-Terrorism

Instability

Humanitarian

Natural Disasters

Failed/Failing States

Climate Change

Extremist Networks

Protracted confrontation . . . fueled by _six important trends_

7 Army Initiatives

1. Accelerate growth and readiness improvements

2. *Enhance the quality of support to Soldiers, Civilians, and Families*

3. Maintain the continuity and momentum of modernization

4. Complete Reserve Component transition to an Operational Force

5. *Accelerate change in leader development to grow leaders for tomorrow's strategic environment*

6. *Adapt institutional policies, programs, and procedures to support an expeditionary Army at war*

7. Build strategic communication capabilities to effectively communicate with internal and external audiences

Army Imperatives

Sustain – Army's Soldiers, Families, and Civilians

Recruiting, training, and retaining our Soldiers – the centerpiece of the Army – our <u>ultimate asymmetric advantage</u> – one thing that <u>cannot be matched</u> by our adversaries – <u>now or in the future</u>

Prepare – Forces to succeed in current conflict

Equipping our Soldiers and continually adapting our training and equipment – to <u>ensure an advantage over any enemy</u>

Reset – Our Units

Rebuild readiness for future deployments and contingencies – <u>sustained combat has taken a toll on Soldiers, Leaders, Families, and Equipment</u>

Transform – Meet demands of the 21st Century

Holistic effort to adapt how we fight, train, modernize, develop leaders, station, and support our Soldiers, Families, and Civilians – <u>Transformation is a Journey, not a destination</u>

Network Service Centers

Cyber Operations/Warfare

CIO/G-6 500-Day Plan

Knowledge Management & Data Czar

Program Objective Memorandum 2010-2015

Regional Hub Nodes

- **Five locations to provide complete & overlapping coverage of Combatant Command Areas of Responsibility (AOR)**
  - **All connected to the Global Information Grid (GIG)**
  - **Focus on Intertheater vs. Reachback via Teleports**
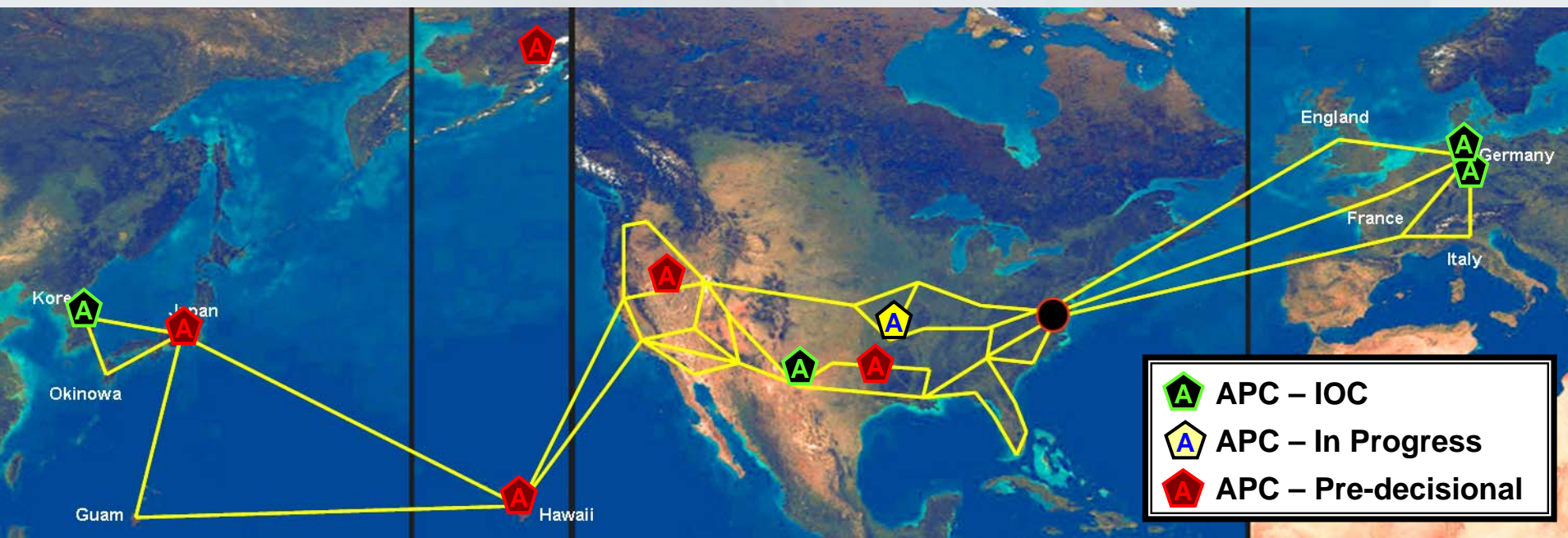 - **Support Army/USMC Units & Comm-on-the-Move**

**Regional Hub Nodes (RHN) –
5 Planned Locations World Wide**

Landstuhl/Ramstein

Camp Roberts

North West

Lago Di Patria

Ft. Buckner

Wahiawa

➤ **The purpose of the APC initiative is to improve delivery services through:**

– **Achieving Net-Centric Operations and Warfare Environment**
– **Improving IA and Security Posture**
– **Reducing Total Cost of Ownership (TCO) for Information Technology**

Legend:
- **A** APC – IOC
- **A** APC – In Progress
- **A** APC – Pre-decisional

Regional Hub Node (RHN)

- Provides Global Transport
- Intra-Theater Connectivity
- Up to 3 Div per Hub Node
- Connect to each other & DISN services in garrison

Area Processing Center (APC)

- Data & Applications
- Consolidated IT hardware
- Projection & forward staging of info & services

Theater NetOps & Security Center (TNOSC)

- Information Assurance (IA)
- NetOps & Security
- Technical oversight, content & spectrum management & Help Desk

Network Service Center – Concept
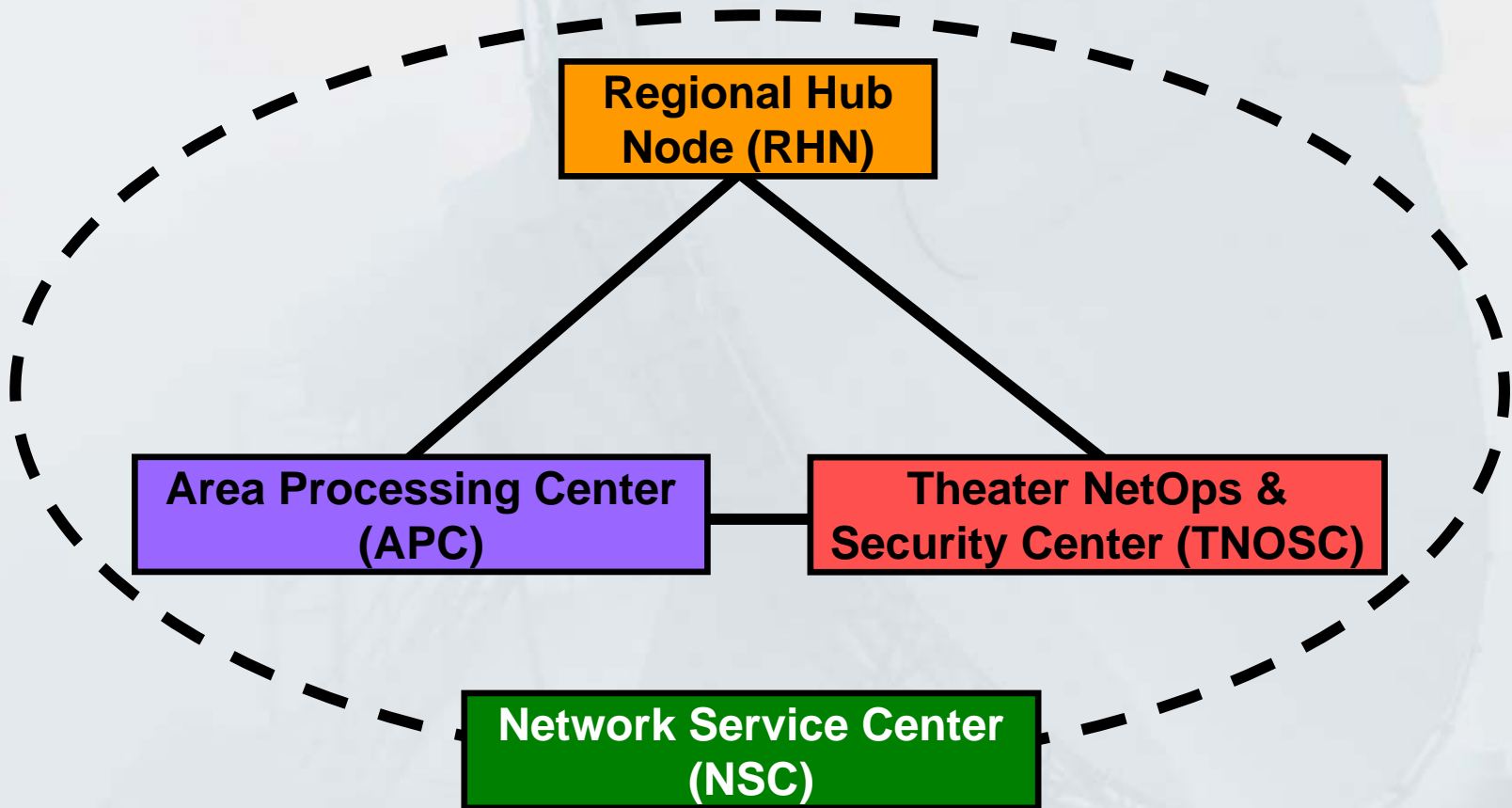
Regional Hub Node (RHN)

Area Processing Center (APC)

Theater NetOps & Security Center (TNOSC)

Network Service Center (NSC)

Global "Always On"

America's Army: The Strength of the Nation – Army Strong
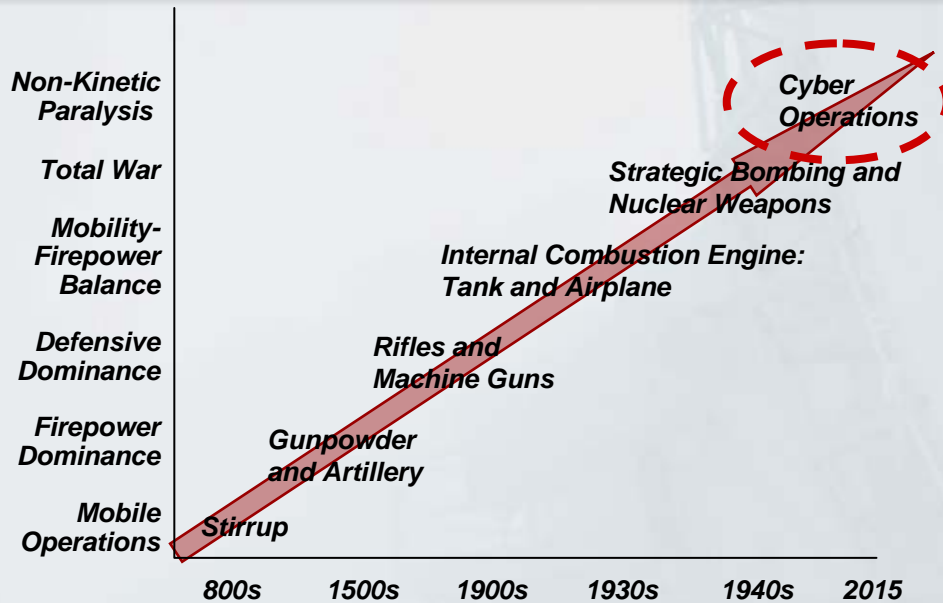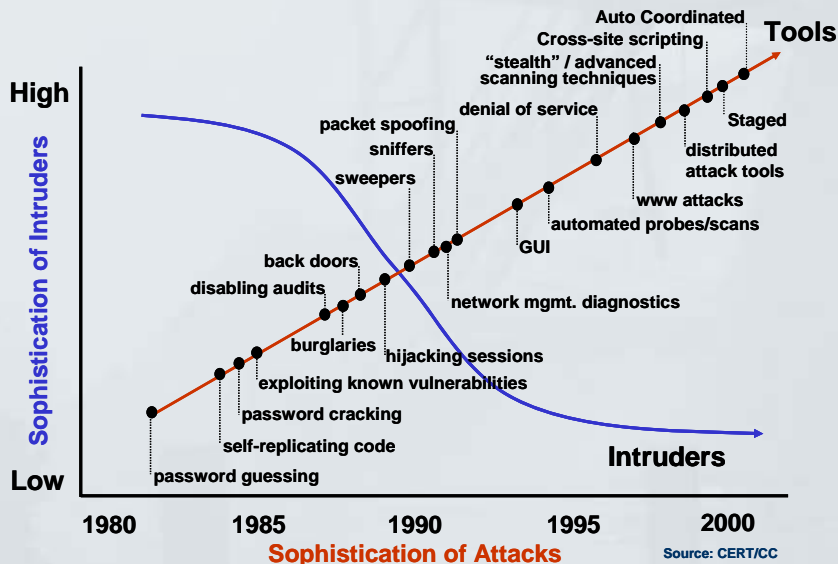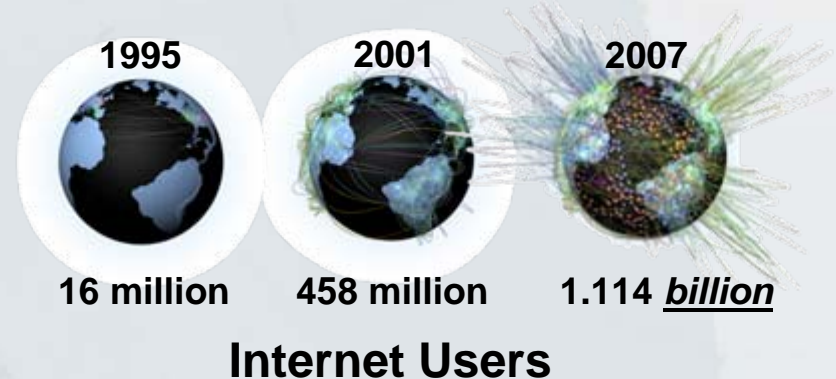
- **Network Service Centers**

- **Cyber Operations/Warfare**

- **CIO/G-6 500-Day Plan**

- **Knowledge Management & Data Czar**

- **Program Objective Memorandum 2010-2015**

Non-Kinetic Paralysis

Total War

Mobility-Firepower Balance

Defensive Dominance

Firepower Dominance

Mobile Operations

Cyber Operations

Strategic Bombing and Nuclear Weapons

Internal Combustion Engine: Tank and Airplane

Rifles and Machine Guns

Gunpowder and Artillery

Stirrup

| 800s | 1500s | 1900s | 1930s | 1940s | 2015 |

The importance of cyberspace as an arena of conflict will only grow as the world becomes more wired

1995	2001	2007
16 million	458 million	1.114 *billion*

Internet Users

Sophistication of Intruders

High

Low

Tools

Auto Coordinated
Cross-site scripting
"stealth" / advanced scanning techniques
denial of service
packet spoofing
sniffers
sweepers
back doors
disabling audits
burglaries
hijacking sessions
exploiting known vulnerabilities
password cracking
self-replicating code
password guessing
network mgmt. diagnostics
GUI
automated probes/scans
www attacks
distributed attack tools
Staged

Intruders

| 1980 | 1985 | 1990 | 1995 | 2000 |

Sophistication of Attacks
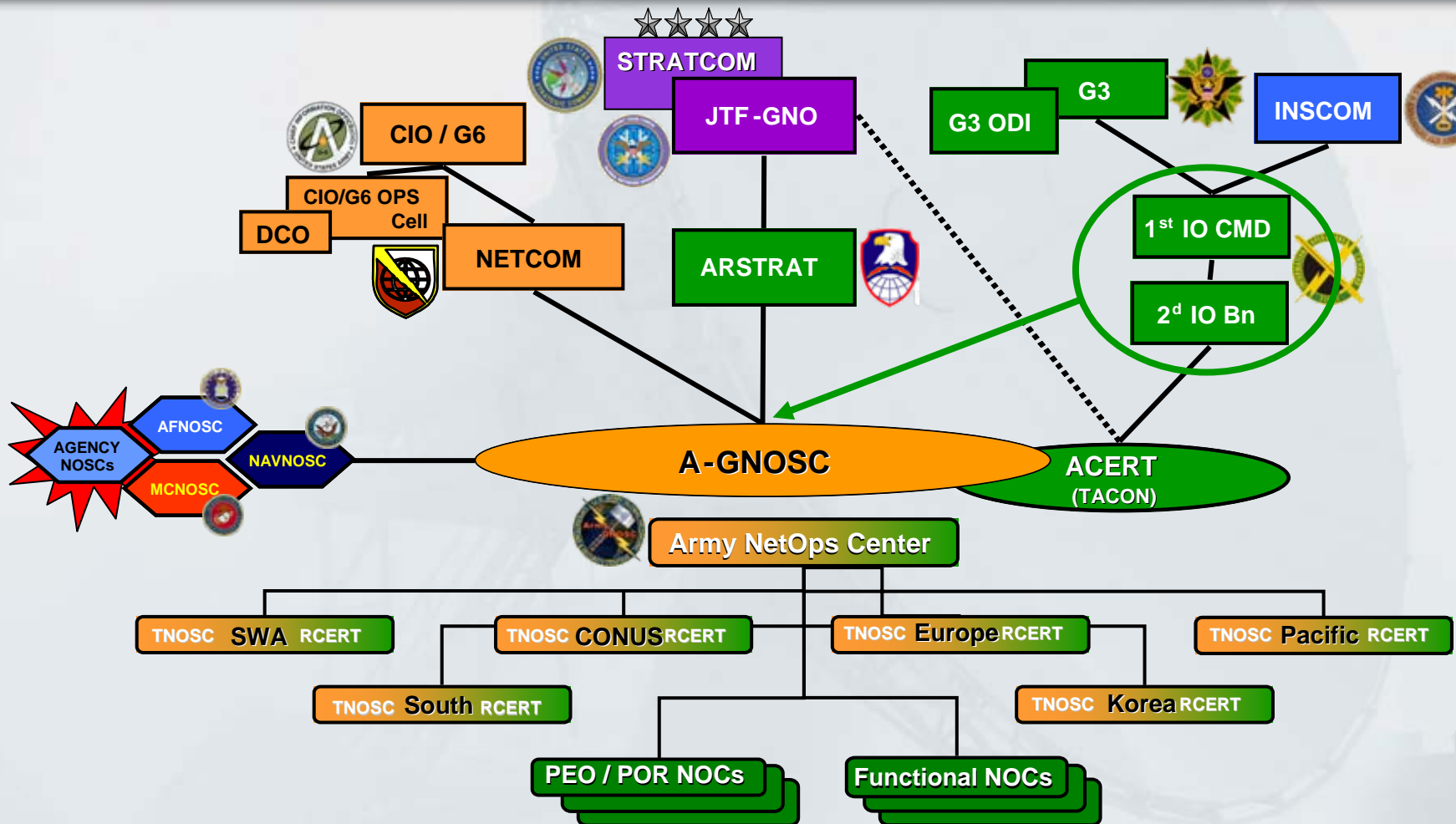
Source: CERT/CC

There is tremendous risk in not investing in CNO:

- **Ultimate WMD – Potential to create social, political, military, and economic havoc**
- **Highly asymmetric**
  - **Could be relatively cheap**
  - **Deliverable from strategic distance**
  - **Very stealthy**

Army Cyber Operations Support

Cyberspace: "A global domain within the information environment consisting of the interdependent network of information technology infrastructures that includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers in critical industries."

DepSecDef Memorandum – 21 Feb 08

CIO/G-6 Focus Areas

Network Service Centers

Cyber Operations/Warfare

CIO/G-6 500-Day Plan

Knowledge Management & Data Czar

Program Objective Memorandum 2010-2015

500 Day Plan Goals

- ☑ **Develop and maintain** a secure, seamless, interdependent LandWarNet Network

- ☑ **Lead enterprise integration** to achieve decision superiority by transforming **processes, applications and data** into net-centric capabilities across the Army

- ☑ **Protect and defend** the Army's systems, networks, and information

- ☑ **Ensure Army information management and information technology investments** maximize Joint and Army capabilities

- ☑ **Develop the Army's information technology and information management knowledge and skills** to support mission needs

- ☑ **Deliver an integrated enterprise strategy** that influences Joint and Army use of information management and information technology in furthering the warfighting capabilities
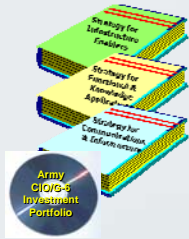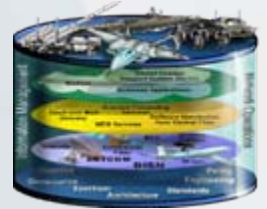
2008-2015 ARMY CIO/G-6 CAMPAIGN PLAN
DELIVERING A JOINT NET-CENTRIC INFORMATION ENTERPRISE
ARMY STRONG.

WHAT WILL BE DONE

2008	2009	2010	2011	2012	2013	2014	2015

FUNDING TO GET IT DONE

| FY08-FY09 Budget | FY09 Budget Update | FY10-FY11 Budget | FY11 Budget Update | FY12-FY13 Budget | FY13 Budget Update | FY14-FY15 Budget | FY15 Budget Update |

ARMY CIO/G-6 500-DAY PLAN
AUGUST 2007
DELIVERING A JOINT NETCENTRIC INFORMATION ENTERPRISE
...IN SUPPORT OF THE ARMY CAMPAIGN PLAN

HOW IT WILL BE DONE

HOW ARE WE DOING IN GETTING IT DONE?

- **CIO/G-6 Campaign Plan is the long-term strategic plan**
  - *What will be done*
- **IM/IT POMs/ Budgets are the operational plans**
  - *Funding to get it done*
- **CIO/G-6 500-Day Plans are the tactical execution plans**
  - *How it will be done*
- **Rolling 100-Day Performance Reviews manage execution of the tactical plans**
  - *How are we doing in getting it done?*
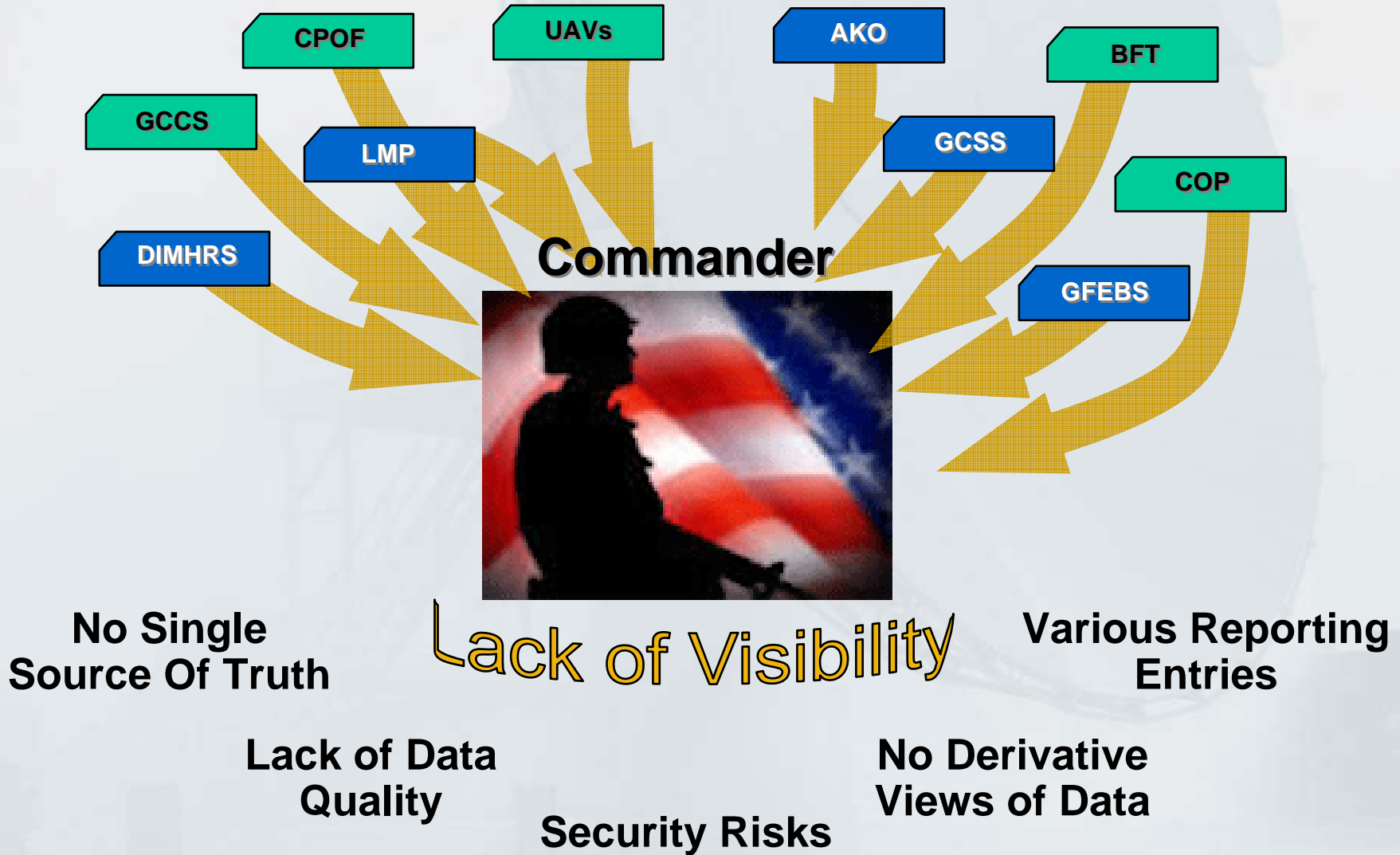
CIO/G-6 Focus Areas

- Network Service Centers

- Cyber Operations/Warfare

- CIO/G-6 500-Day Plan

- **Knowledge Management & Data Czar**

- Program Objective Memorandum 2010-2015

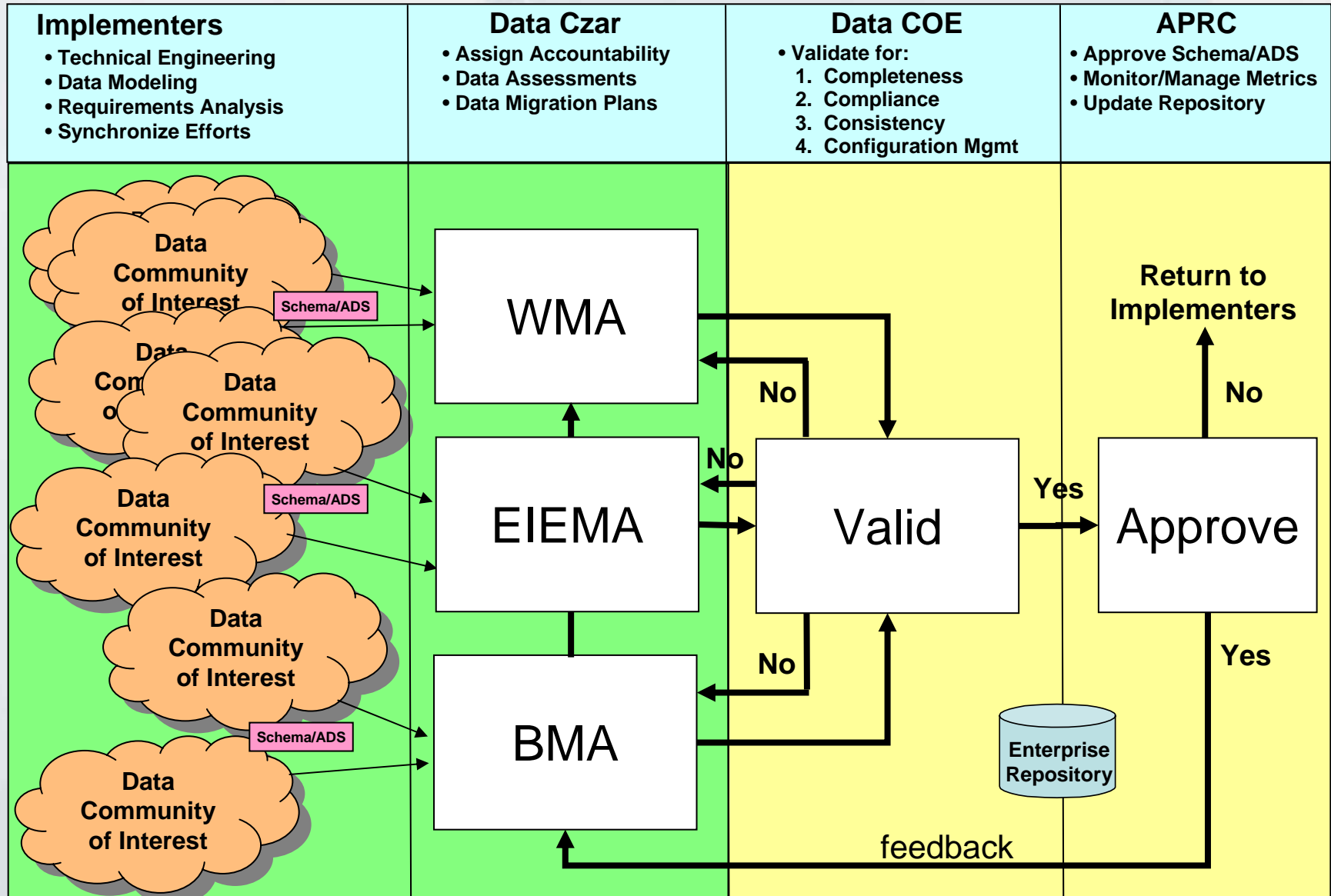# Multiple Reporting Systems and the Need for Change…

CISCO

EIS BO

OSR

ChATT

OMF

EIS WEB

DMR

Sales Executive

MBR

MyCustomer

eExec

BREES

No Single Source Of Truth

LACK OF VISIBILITY

Various Reporting Entries

Lack of Data Quality

No Derivative Views of Data

Security Risks

CPOF

UAVs

AKO

BFT

GCCS

LMP

GCSS

COP

DIMHRS

Commander

GFEBS

**No Single
Source Of Truth**

Lack of Visibility

**Various Reporting
Entries**

**Lack of Data
Quality**

**No Derivative
Views of Data**

Security Risks

Implementers	Data Czar	Data COE	APRC

• Technical Engineering
• Data Modeling
• Requirements Analysis
• Synchronize Efforts
	• Assign Accountability
	• Data Assessments
	• Data Migration Plans
		• Validate for:
		  1. Completeness
		  2. Compliance
		  3. Consistency
		  4. Configuration Mgmt
			• Approve Schema/ADS
			• Monitor/Manage Metrics
			• Update Repository

- Network Service Centers

- Cyber Operations/Warfare

- CIO/G-6 500-Day Plan

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- **Program Objective Memorandum 2010-2015**

Distribution of C4/IT Funding
....Across 6 PEGs (FY 2009 Budget)

Organizing PEG: $449M
- Army Knowledge Online (AKO)
- Network Information Services Agency-Pentagon (NISA-P)

Sustaining PEG: $217M
- Global Combat Service Support- Army (GCSS-A)
- Deployment Automation

Equipping PEG: $6.0B
- MILSATCOM
- Warfighter Information Network- Tactical (WIN-T)
- Joint Tactical Radio System (JTRS)
- Force 21 Battle Command Brigade & Below (FBCB2)
- Army Battlefield Command System (ABCS)

Training PEG: $640M
- Distance Learning
- NETCOM

Manning PEG: $375M
- Army Recruiter Information System (ARIS)
- HRC Automation
- MEPCOM Automation
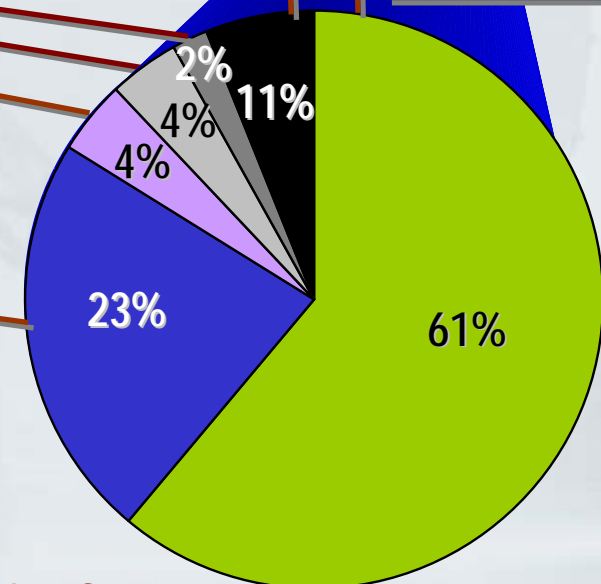
Installation PEG: $2.25B
- Installation Information Infrastructure Modernization Plan (I3MP)
- Reserve Component Automation System (RCAS)
- Long Haul (NIPR, SIPR & DSN)
- Base Support
- Information Assurance (IA)

Total Army Funding

$139B

C4/IT Funding
- $9.97B
- 7.2% of Army TOA

Pie chart values: 61%, 23%, 11%, 4%, 4%, 2%

MDEP DESCRIPTION	FY09
FUTURE COMBAT SYSTEM (FCS)	$2.0 Billion
TACTICAL NETWORK COMMUNICATIONS	$790 Million
BASE INFORMATION MANAGEMENT OPERATIONS	$392 Million
BASE COMMUNICATIONS	$392 Million
9TH ARMY SIGNAL COMMAND	$365 Million
FORCE XXI BATTLE COMMAND BRIGADE & BELOW (FBCB2)	$298 Million
ARMY BATTLE COMMAND SYSTEM (ABCS) INTEGRATION	$289 Million
LONG HAUL COMMUNICATIONS	$255 Million
INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM (I3MP)	$250 Million
MILITARY SATELLITE COMMUNICATIONS (MILSATCOM)	$243 Million

The Army runs the world's largest portal (AKO/DKO), and is the single largest customer of Microsoft, Dell, MPC, and Linux, and in the HP top-5

Conclusions!!!

Posturing for Persistent Conflict

…driving an Expeditionary Army

CIO/G-6 Focus Areas

…NSC, Cyber Ops, 500-Day Plan, KM & Data Czar

Army Way Ahead

…working key programs & initiatives in POM

Shared Situational Awareness

…Bottom Line to Joint Warfighter

QUESTIONS + THOUGHTS

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